

Experiment Number: 20105 - 59

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Date Report Requested: 01/02/2018

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Final 2 - Data Changes through 12-15-17 GSM Rats Core Only

NTP Study Number:

C20105

Lock Date:

12/29/2015

Cage Range:

ALL

Date Range:

ALL

Reasons For Removal:

25022 ACCK

25021 TSAC

25020 NATD

25019 MSAC

Removal Date Range:

ALL

Treatment Groups:

Include ALL

Study Gender:

Both

TDMSE Version:

3.0.2.3_002

PWG Approval Date:

NONE

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE

0.0W/kg(GSM)chr

1.5W/kg(GSM)chr

3.0W/kg(GSM)chr

6.0W/kg(GSM)chr

Disposition Summary

	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Animals Initially In Study	105	105	105	105
Early Deaths				
Accidentally Killed	1			1
Moribund Sacrifice	44	24	19	13
Natural Death	20	21	21	16
Survivors				
Terminal Sacrifice	25	45	50	60
Animals Examined Microscopically	90	90	90	90

ALIMENTARY SYSTEM

	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Esophagus	(90)	(89)	(90)	(90)
Dilation	2 [4.0]			
Hyperplasia	1 [2.0]			
Arteriole, Inflammation, Chronic Active		1 [3.0]		
Artery, Inflammation, Chronic Active			1 [2.0]	
Intestine Large, Cecum	(75)	(75)	(79)	(80)
Edema	11 [2.0]	1 [2.0]		4 [1.8]
Erosion	10 [2.5]			3 [2.0]
Inflammation, Acute	10 [2.8]	1 [2.0]		2 [1.5]
Inflammation, Chronic Active	1 [3.0]			
Ulcer	6 [2.3]			
Artery, Inflammation, Chronic Active	20 [2.1]	9 [2.0]	5 [1.8]	6 [1.8]
Artery, Mineral	1 [2.0]			
Epithelium, Erosion				1 [1.0]
Epithelium, Regeneration	14 [2.4]			2 [2.5]
Intestine Large, Colon	(81)	(83)	(81)	(82)
Edema		1 [1.0]		1 [1.0]
Erosion	1 [1.0]			1 [1.0]
Inflammation, Acute	1 [1.0]			
Ulcer	1 [1.0]			
Artery, Inflammation, Chronic Active	12 [1.8]	5 [2.4]	5 [2.2]	5 [1.6]
Artery, Mineral	2 [2.0]			
Epithelium, Regeneration	5 [2.6]			2 [1.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Intestine Large, Rectum	(83)	(81)	(85)	(87)
Cyst			1	
Edema	1 [4.0]			1 [1.0]
Erosion	1 [1.0]			
Hyperplasia, Lymphocyte	1 [4.0]	1 [3.0]		
Inflammation, Acute	2 [2.5]			
Artery, Inflammation, Chronic Active	4 [1.8]	7 [2.9]	4 [1.8]	2 [1.5]
Epithelium, Regeneration	3 [2.3]			
Intestine Small, Duodenum	(81)	(82)	(79)	(79)
Dilation			1 [2.0]	
Erosion	1 [2.0]			
Ulcer	1 [3.0]			
Intestine Small, Ileum	(78)	(76)	(78)	(76)
Artery, Inflammation, Chronic Active	2 [2.5]	1 [2.0]		
Epithelium, Regeneration	1 [2.0]			
Intestine Small, Jejunum	(73)	(76)	(70)	(76)
Dilation			1 [2.0]	
Liver	(90)	(90)	(90)	(90)
Angiectasis	1 [2.0]		1 [3.0]	
Basophilic Focus	1	1		
Clear Cell Focus	8	7	22	16
Eosinophilic Focus	12	5	2	8
Extramedullary Hematopoiesis	5 [1.2]	4 [1.0]	1 [1.0]	4 [1.3]
Hepatodiaphragmatic Nodule	1		2	2
Infiltration Cellular, Mixed Cell	3 [1.0]	2 [1.5]		5 [1.2]
Mixed Cell Focus	32	45	50	58
Artery, Inflammation, Chronic Active	2 [3.5]	5 [2.4]	1 [1.0]	
Artery, Mineral	1 [1.0]			
Artery, Thrombus		1 [4.0]		
Bile Duct, Cyst	3	3	2	
Bile Duct, Fibrosis				1 [1.0]
Bile Duct, Hyperplasia	41 [1.2]	35 [1.2]	37 [1.3]	33 [1.3]
Centrilobular, Hepatocyte, Hypertrophy		1 [1.0]		
Hepatocyte, Degeneration	1 [3.0]			
Hepatocyte, Degeneration, Cystic			1 [1.0]	
Hepatocyte, Necrosis	5 [1.8]	6 [1.3]	8 [1.9]	1 [1.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Hepatocyte, Vacuolation, Cytoplasmic	6 [1.5]	4 [2.0]	9 [2.2]	3 [2.0]
Kupffer Cell, Pigment	1 [2.0]	1 [1.0]		1 [1.0]
Periductal, Cholangiofibrosis	2 [3.0]	1 [3.0]	1 [4.0]	1 [2.0]
Mesentery	(39)	(19)	(17)	(7)
Hemorrhage	1 [3.0]			
Inflammation, Chronic	2 [1.5]			
Inflammation, Chronic Active		1 [1.0]		
Necrosis	2 [3.0]	3 [2.7]	1 [3.0]	
Neovascularization	1 [3.0]	1 [2.0]		
Arteriole, Inflammation, Chronic Active		1 [2.0]		
Artery, Inflammation, Chronic Active	32 [2.3]	12 [2.7]	14 [2.6]	5 [2.2]
Artery, Mineral	21 [2.1]	4 [2.3]	5 [2.6]	2 [1.5]
Vein, Degeneration	1 [1.0]			
Vein, Inflammation, Chronic Active	1 [1.0]	1 [2.0]		1 [1.0]
Oral Mucosa	(0)	(2)	(0)	(2)
Hyperplasia				1 [3.0]
Ulcer		1 [4.0]		
Pancreas	(90)	(89)	(88)	(86)
Cyst	1			
Inflammation, Chronic Active				1 [1.0]
Thrombus	1 [4.0]			
Acinus, Atrophy	13 [1.2]	16 [1.1]	10 [1.2]	11 [1.2]
Acinus, Hyperplasia	63 [2.4]	58 [2.6]	44 [2.5]	32 [2.5]
Artery, Inflammation, Chronic Active	48 [2.3]	28 [2.1]	26 [2.4]	14 [2.0]
Artery, Mineral	11 [1.8]	3 [1.7]	3 [2.0]	1 [3.0]
Salivary Glands	(90)	(90)	(90)	(90)
Inflammation, Chronic Active		1 [3.0]		
Artery, Inflammation, Chronic Active	11 [2.5]	7 [2.6]	3 [2.7]	1 [3.0]
Artery, Mineral	2 [2.5]			
Duct, Parotid Gland, Dilation	5 [2.0]	3 [2.0]	1 [1.0]	4 [2.0]
Duct, Parotid Gland, Inflammation, Acute	1 [2.0]			
Parotid Gland, Atrophy	18 [2.0]	16 [2.2]	14 [2.1]	14 [1.9]
Parotid Gland, Inflammation, Acute	2 [2.0]	7 [1.4]	3 [2.3]	1 [2.0]
Parotid Gland, Vacuolation, Cytoplasmic	1 [2.0]			
Sublingual Gland, Inflammation, Acute			1 [1.0]	
Submandibular Gland, Atrophy		1 [2.0]	1 [3.0]	

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Stomach, Forestomach	(90)	(90)	(90)	(90)
Cyst		1		
Edema	5 [2.0]	11 [1.6]	3 [2.0]	2 [3.0]
Erosion		1 [2.0]	1 [2.0]	
Fibrosis				1 [1.0]
Inflammation, Acute	1 [1.0]	1 [2.0]		
Inflammation, Chronic Active	7 [1.9]	14 [1.7]	5 [2.2]	6 [2.0]
Mineral	1 [3.0]		1 [2.0]	
Necrosis				1 [4.0]
Ulcer	6 [2.0]	8 [2.3]	3 [2.0]	2 [2.0]
Artery, Inflammation, Chronic Active		4 [1.8]	3 [2.0]	
Epithelium, Degeneration		1 [2.0]		
Epithelium, Hyperplasia	11 [3.2]	21 [2.5]	12 [2.0]	11 [2.5]
Epithelium, Hyperplasia, Atypical	1 [2.0]			
Epithelium, Hyperplasia, Basal Cell			1 [2.0]	
Stomach, Glandular	(86)	(88)	(87)	(86)
Erosion	3 [1.3]		2 [1.5]	1 [2.0]
Hemorrhage			1 [2.0]	
Inflammation, Granulomatous		1 [2.0]		
Inflammation, Acute	1 [1.0]		1 [1.0]	
Inflammation, Chronic Active	1 [1.0]	3 [1.3]		
Mineral	31 [2.5]	7 [2.9]	8 [2.4]	4 [2.5]
Ulcer			1 [1.0]	
Artery, Inflammation, Chronic Active	3 [2.3]	2 [2.5]	2 [1.5]	1 [2.0]
Tooth	(0)	(1)	(1)	(0)
Dysplasia		1		

CARDIOVASCULAR SYSTEM

Aorta	(90)	(90)	(90)	(90)
Aneurysm		1 [4.0]		
Dilation		1 [3.0]	3 [1.3]	
Mineral	30 [2.1]	7 [2.3]	12 [1.6]	6 [1.5]
Blood Vessel	(1)	(2)	(1)	(0)
Mineral	1 [4.0]			

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Pulmonary Artery, Inflammation, Chronic Active		1 [4.0]	1 [2.0]	
Pulmonary Artery, Necrosis		1 [3.0]	1 [1.0]	
Heart	(90)	(90)	(90)	(90)
Cardiomyopathy	79 [1.9]	82 [1.8]	78 [2.1]	79 [1.6]
Congestion	1 [3.0]			
Hemorrhage				1 [1.0]
Thrombus	1 [2.0]			
Artery, Infiltration Cellular, Histiocyte			1 [1.0]	
Artery, Inflammation, Chronic Active		5 [1.4]	4 [1.0]	2 [1.5]
Artery, Mineral	20 [2.5]	7 [1.9]	3 [2.0]	2 [1.5]
Artery, Necrosis		1 [2.0]		
Atrium, Dilatation	3 [2.0]		1 [2.0]	
Atrium, Thrombus	1 [3.0]	1 [2.0]		
Atrium, Myocardium, Hypertrophy	1 [3.0]			
Endocardium, Hyperplasia, Schwann Cell		1 [1.0]		2 [2.0]
Myocardium, Mineral	9 [1.4]	2 [2.0]	4 [1.8]	1 [1.0]
Myocardium, Necrosis	1 [2.0]			
Valve, Inflammation, Chronic Active	1 [2.0]			
Ventricle Right, Cardiomyopathy	54 [1.1]	62 [1.5]	72 [1.9]	74 [1.8]

ENDOCRINE SYSTEM

Adrenal Cortex	(90)	(90)	(90)	(88)
Accessory Adrenal Cortical Nodule	6	7	6	4
Angiectasis			1 [2.0]	2 [1.0]
Atrophy			1 [4.0]	1 [3.0]
Congestion			1 [1.0]	
Degeneration	3 [1.0]			
Degeneration, Cystic			2 [1.5]	2 [2.0]
Hemorrhage			1 [2.0]	
Hyperplasia	47 [1.7]	46 [1.8]	46 [1.8]	45 [1.9]
Hypertrophy	35 [1.5]	43 [1.6]	50 [1.4]	54 [1.3]
Necrosis	5 [2.4]	3 [1.3]	4 [1.5]	
Thrombus	2 [3.0]	1 [4.0]		
Vacuolation, Cytoplasmic	20 [1.5]	32 [1.4]	25 [1.6]	22 [1.3]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Adrenal Medulla	(88)	(90)	(89)	(87)
Degeneration, Cystic		1 [2.0]		
Hyperplasia	42 [2.0]	24 [2.1]	26 [1.9]	35 [2.0]
Thrombus	1 [4.0]			
Islets, Pancreatic	(90)	(89)	(86)	(85)
Hyperplasia	12 [1.5]	5 [2.8]	5 [2.0]	7 [1.7]
Parathyroid Gland	(83)	(87)	(87)	(81)
Cyst				1
Hyperplasia	51 [2.5]	35 [2.0]	46 [2.0]	28 [1.6]
Hyperplasia, Focal			2 [2.5]	1 [2.0]
Pituitary Gland	(89)	(90)	(90)	(90)
Necrosis			1 [3.0]	
Craniopharyngeal Duct, Cyst	1			
Pars Distalis, Cyst	5	9	15	16
Pars Distalis, Hyperplasia	32 [2.4]	34 [2.4]	35 [2.4]	32 [2.2]
Pars Distalis, Necrosis				1 [4.0]
Pars Intermedia, Angiectasis	1 [4.0]			
Pars Intermedia, Cyst	6	5	9	6
Pars Intermedia, Hyperplasia	1 [3.0]	1 [4.0]	2 [2.0]	2 [1.5]
Pars Nervosa, Cyst		1		
Pars Nervosa, Developmental Malformation			1	1
Pars Nervosa, Infiltration Cellular, Mixed Cell				1 [2.0]
Thyroid Gland	(89)	(89)	(89)	(87)
Congestion				1 [2.0]
Ectopic Thymus			1	
C-cell, Hyperplasia	16 [1.8]	24 [1.9]	18 [1.9]	14 [1.6]
Follicle, Cyst		1	1	1
Follicle, Hyperplasia, Cystic	1 [1.0]			
Follicular Cell, Hyperplasia		1 [1.0]		
Follicular Cell, Hypertrophy		1 [2.0]		1 [1.0]

GENERAL BODY SYSTEM

Tissue NOS	(3)	(4)	(4)	(5)
Inflammation, Chronic Active		1 [4.0]		

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Abdominal, Fat, Hemorrhage	1 [3.0]			
Abdominal, Fat, Inflammation, Chronic Active		1 [4.0]		
Fat, Necrosis	2 [3.0]		2 [2.5]	3 [2.0]
Mediastinum, Inflammation, Chronic Active			1 [3.0]	1 [2.0]

GENITAL SYSTEM

Bulbourethral Gland	(1)	(0)	(0)	(0)
Coagulating Gland	(0)	(0)	(0)	(1)
Inflammation, Chronic Active				1 [3.0]
Ductus Deferens	(1)	(0)	(0)	(0)
Granuloma	1 [4.0]			
Epididymis	(90)	(90)	(90)	(90)
Exfoliated Germ Cell	51 [1.9]	26 [1.5]	29 [1.4]	15 [1.5]
Granuloma Sperm	1 [3.0]			
Hypospermia	28 [3.4]	20 [3.2]	23 [3.0]	8 [3.3]
Inflammation, Acute		1 [2.0]		
Inflammation, Chronic Active		1 [1.0]		
Artery, Inflammation, Chronic Active	2 [2.5]	2 [2.0]	1 [4.0]	2 [2.5]
Penis	(0)	(0)	(0)	(1)
Preputial Gland	(88)	(90)	(90)	(90)
Atrophy	1 [2.0]			
Hyperplasia	1 [2.0]			
Inflammation, Suppurative		1 [2.0]	3 [2.7]	
Inflammation, Granulomatous	1 [4.0]			
Inflammation, Acute	1 [1.0]			
Inflammation, Chronic Active	46 [2.0]	48 [1.8]	54 [1.8]	52 [1.7]
Artery, Inflammation, Chronic Active	1 [3.0]			1 [3.0]
Duct, Dilation	51 [2.4]	53 [2.6]	49 [2.4]	51 [2.0]
Duct, Hyperplasia		1 [2.0]		1 [2.0]
Duct, Mineral				1 [1.0]
Prostate	(90)	(90)	(90)	(90)
Decreased Secretory Fluid	4 [2.0]	6 [2.0]	6 [2.5]	2 [2.0]
Hemorrhage	1 [2.0]			
Infiltration Cellular, Mononuclear Cell	1 [2.0]			1 [2.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Inflammation, Suppurative		1 [1.0]	1 [1.0]	
Inflammation, Acute	7 [2.9]	3 [1.3]	6 [2.3]	4 [2.8]
Inflammation, Chronic Active	6 [1.2]	15 [1.9]	9 [1.4]	13 [1.8]
Artery, Inflammation, Chronic Active	1 [3.0]	1 [2.0]	1 [2.0]	
Epithelium, Hyperplasia	5 [1.2]	13 [1.6]	11 [1.9]	11 [2.4]
Seminal Vesicle	(90)	(89)	(89)	(90)
Decreased Secretory Fluid	35 [2.9]	18 [2.9]	22 [3.2]	11 [2.8]
Degeneration				1 [1.0]
Hemorrhage	1 [2.0]			
Inflammation, Acute	4 [3.0]		3 [3.3]	1 [2.0]
Inflammation, Chronic			1 [2.0]	
Inflammation, Chronic Active	1 [1.0]	4 [2.5]	1 [2.0]	1 [4.0]
Artery, Inflammation, Chronic Active	1 [3.0]	1 [2.0]		
Epithelium, Hyperplasia	1 [1.0]			
Testis	(90)	(90)	(90)	(90)
Cyst	1			
Edema		2 [3.5]	3 [2.3]	2 [2.5]
Inflammation, Chronic Active	2 [3.5]			
Pigment	1 [1.0]			
Artery, Inflammation, Chronic Active	52 [2.9]	40 [2.9]	37 [2.9]	20 [2.7]
Germ Cell, Degeneration	51 [2.3]	35 [2.2]	42 [2.1]	20 [2.0]
Germinal Epithelium, Mineral		1 [1.0]		
Interstitial Cell, Hyperplasia	1 [1.0]	2 [3.5]		4 [2.3]
Rete Testis, Dilation	1 [2.0]			
Seminiferous Tubule, Dilation	1 [2.0]	1 [2.0]	1 [2.0]	1 [1.0]
Tunic, Hemorrhage		1 [2.0]		

HEMATOPOIETIC SYSTEM

Bone Marrow	(90)	(90)	(90)	(90)
Fibrosis				1 [2.0]
Hemorrhage		1 [2.0]	3 [2.3]	
Hypercellularity	15 [1.9]	42 [1.8]	32 [1.7]	23 [2.1]
Lymph Node	(25)	(22)	(18)	(12)

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Artery, Mediastinal, Inflammation, Chronic Active		1 [2.0]		1 [2.0]
Artery, Mediastinal, Mineral		1 [2.0]		
Bronchial, Erythrophagocytosis			3 [3.0]	
Iliac, Erythrophagocytosis	2 [2.0]	2 [3.5]	1 [2.0]	
Iliac, Hyperplasia, Lymphocyte	2 [2.0]			1 [2.0]
Iliac, Infiltration Cellular, Histiocyte	2 [2.0]		1 [2.0]	
Iliac, Pigment			1 [2.0]	
Iliac, Proliferation, Plasma Cell	3 [2.0]	1 [2.0]	1 [1.0]	2 [2.5]
Iliac, Lymphatic Sinus, Ectasia	5 [1.8]	2 [1.5]		1 [2.0]
Lumbar, Erythrophagocytosis	2 [2.0]	1 [1.0]	1 [1.0]	1 [2.0]
Lumbar, Hemorrhage		1 [2.0]		
Lumbar, Hyperplasia, Lymphocyte		1 [1.0]		1 [2.0]
Lumbar, Proliferation, Plasma Cell		1 [2.0]		1 [3.0]
Lumbar, Lymphatic Sinus, Ectasia		2 [2.0]	1 [2.0]	
Lymphatic Sinus, Mediastinal, Ectasia	1 [3.0]	1 [3.0]		1 [2.0]
Lymphatic Sinus, Renal, Ectasia		3 [1.7]	1 [1.0]	1 [3.0]
Mediastinal, Congestion			2 [3.0]	
Mediastinal, Erythrophagocytosis	6 [2.5]	5 [2.0]	5 [1.8]	6 [2.5]
Mediastinal, Hemorrhage	1 [3.0]	1 [3.0]		
Mediastinal, Infiltration Cellular, Histiocyte		1 [2.0]		
Pancreatic, Erythrophagocytosis	3 [2.3]	1 [2.0]		2 [2.0]
Pancreatic, Hemorrhage	1 [2.0]			
Pancreatic, Hyperplasia, Lymphocyte	1 [3.0]			
Pancreatic, Proliferation, Plasma Cell			1 [2.0]	
Renal, Erythrophagocytosis	8 [2.6]	4 [2.5]	3 [2.0]	1 [4.0]
Renal, Hemorrhage		1 [3.0]		
Renal, Hyperplasia, Lymphocyte		1 [1.0]		1 [3.0]
Renal, Proliferation, Plasma Cell	2 [2.0]			1 [2.0]
Lymph Node, Mandibular	(89)	(90)	(89)	(90)
Atrophy, Lymphoid		1 [3.0]		
Congestion				3 [2.0]
Erythrophagocytosis		2 [3.0]	4 [2.3]	3 [1.7]
Hemorrhage		1 [2.0]		
Hyperplasia, Lymphocyte	41 [1.8]	50 [1.8]	54 [1.9]	57 [1.9]
Infiltration Cellular, Histiocyte				1 [2.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Infiltration Cellular, Polymorphonuclear	2 [2.5]			
Inflammation, Suppurative				1 [1.0]
Inflammation, Chronic Active				1 [4.0]
Pigment			1 [2.0]	1 [1.0]
Proliferation, Plasma Cell	49 [1.9]	67 [2.1]	69 [2.0]	68 [2.0]
Lymphatic Sinus, Ectasia	16 [1.9]	12 [1.8]	20 [2.1]	16 [1.8]
Lymph Node, Mesenteric	(90)	(89)	(86)	(89)
Atrophy		1 [3.0]		
Depletion Cellular			1 [4.0]	
Erythrophagocytosis	17 [1.8]	7 [1.9]	7 [2.0]	8 [1.0]
Hyperplasia, Lymphocyte	2 [1.5]		1 [3.0]	4 [2.3]
Infiltration Cellular, Histiocyte	1 [2.0]		1 [1.0]	
Infiltration Cellular, Polymorphonuclear	2 [2.0]			
Proliferation, Plasma Cell				1 [1.0]
Artery, Inflammation, Chronic Active			1 [2.0]	
Lymphatic Sinus, Ectasia		3 [1.0]	2 [2.0]	1 [4.0]
Lymphocyte, Depletion	2 [2.5]			
Spleen	(90)	(90)	(89)	(90)
Congestion				1 [2.0]
Developmental Malformation	1			
Erythrophagocytosis				1 [4.0]
Extramedullary Hematopoiesis	45 [1.9]	58 [1.9]	56 [1.6]	64 [1.7]
Hemorrhage			2 [1.5]	
Hyperplasia, Lymphocyte	5 [1.2]	2 [1.5]	2 [1.5]	
Hyperplasia, Plasma Cell			1 [2.0]	2 [2.0]
Pigment	57 [1.9]	62 [1.8]	74 [1.6]	74 [1.6]
Arteriole, Mineral	1 [2.0]			
Artery, Inflammation, Chronic Active		1 [3.0]	4 [2.3]	1 [2.0]
Artery, Mineral			1 [2.0]	
Capsule, Fibrosis		1 [1.0]		
Red Pulp, Atrophy	26 [2.2]	10 [2.0]	10 [2.4]	3 [2.3]
White Pulp, Atrophy	30 [2.1]	16 [1.8]	13 [1.8]	11 [2.1]
Thymus	(88)	(86)	(88)	(86)
Atrophy	79 [3.0]	71 [2.4]	75 [2.2]	78 [2.3]
Congestion				1 [2.0]
Cyst	10	10	9	10

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Ectopic Parathyroid Gland	6	1	2	3
Ectopic Thyroid	1	4		2
Hemorrhage	2 [2.0]	2 [2.0]	2 [2.0]	2 [3.0]
Hyperplasia, Epithelial	2 [1.5]	4 [1.0]	2 [1.5]	2 [1.0]
Thrombus			2 [2.0]	
Artery, Inflammation, Chronic Active	6 [2.7]	3 [3.0]	2 [2.5]	1 [2.0]

INTEGUMENTARY SYSTEM

Mammary Gland	(82)	(76)	(82)	(82)
Atrophy	1 [4.0]		2 [2.0]	
Galactocele	1			
Hyperplasia		2 [1.0]	5 [1.6]	2 [1.0]
Inflammation, Granulomatous		1 [1.0]		
Artery, Inflammation, Chronic Active		1 [3.0]		
Duct, Dilation	3 [2.0]	13 [1.7]	3 [1.7]	13 [1.7]
Skin	(90)	(90)	(90)	(90)
Cyst Epithelial Inclusion	3	6	8	10
Cyst Epithelial Inclusion, Multifocal				1
Hyperkeratosis		1 [1.0]	2 [1.5]	
Inflammation, Chronic			1 [4.0]	
Inflammation, Chronic Active	1 [2.0]	1 [4.0]	2 [3.0]	1 [1.0]
Ulcer	2 [4.0]	3 [3.7]	2 [3.0]	
Artery, Subcutaneous Tissue, Inflammation, Chronic Active	1 [3.0]			
Epidermis, Hyperplasia	1 [2.0]	2 [1.5]	2 [1.5]	1 [2.0]
Hair Follicle, Atrophy		1 [1.0]	1 [2.0]	
Hair Follicle, Dilation				1 [2.0]
Lip, Subcutaneous Tissue, Foreign Body				1
Lip, Subcutaneous Tissue, Inflammation, Chronic Active				1 [4.0]
Prepuce, Cyst Epithelial Inclusion		1		
Subcutaneous Tissue, Degeneration		1 [3.0]		
Subcutaneous Tissue, Fibrosis				1 [1.0]
Subcutaneous Tissue, Inflammation, Suppurative	1 [4.0]			

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
---------------------------------	-----------------	-----------------	-----------------	-----------------

Subcutaneous Tissue, Inflammation, Acute		1 [3.0]		
Subcutaneous Tissue, Inflammation, Chronic	1 [2.0]			
Subcutaneous Tissue, Inflammation, Chronic Active		2 [3.0]	1 [4.0]	2 [4.0]

MUSCULOSKELETAL SYSTEM

Bone	(90)	(90)	(90)	(90)
Fibrous Osteodystrophy	46 [1.4]	18 [1.1]	14 [1.0]	6 [1.5]
Increased Bone				1 [1.0]
Skeletal Muscle	(90)	(90)	(90)	(90)
Degeneration	34 [1.8]	49 [1.6]	43 [1.6]	37 [1.7]
Mineral	2 [1.0]			

NERVOUS SYSTEM

Brain	(90)	(90)	(90)	(90)
Compression	7 [1.6]	9 [1.4]	4 [1.3]	10 [1.8]
Cyst		1	1	1
Edema		2 [1.0]	1 [1.0]	
Hemorrhage	2 [1.5]	1 [1.0]	2 [3.0]	
Infiltration Cellular, Mononuclear Cell	1 [1.0]			
Mineral	5 [1.0]	4 [1.0]	6 [1.2]	2 [1.0]
Necrosis	7 [1.7]	3 [1.7]	4 [2.3]	3 [1.3]
Vacuolation, Cytoplasmic		1 [1.0]		
Brain Stem, Hemorrhage			1 [2.0]	
Cerebellum, Atrophy				2 [1.0]
Choroid Plexus, Degeneration	1 [2.0]			
Choroid Plexus, Mineral	3 [1.0]	1 [1.0]		
Glial Cell, Hyperplasia		2 [2.0]	3 [3.0]	1 [4.0]
Meninges, Hyperplasia	1 [1.0]			
Meninges, Hyperplasia, Granular Cell	1 [1.0]		1 [1.0]	
Meninges, Metaplasia, Osseous			1 [2.0]	
Meninges, Mineral		1 [1.0]		

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Perivascular, Infiltration Cellular, Mononuclear Cell		1 [1.0]		
Pineal Gland, Infiltration Cellular, Mononuclear Cell			1 [1.0]	1 [1.0]
Pineal Gland, Mineral	3 [1.3]	10 [1.0]	8 [1.0]	3 [1.0]
Pineal Gland, Vacuolation, Cytoplasmic	12 [2.0]	19 [1.6]	20 [1.6]	13 [1.5]
Nerve Trigeminal	(84)	(88)	(87)	(88)
Degeneration	63 [2.0]	69 [1.7]	65 [1.8]	63 [1.9]
Peripheral Nerve, Sciatic	(90)	(90)	(90)	(90)
Degeneration	86 [2.4]	88 [2.6]	90 [2.5]	87 [2.5]
Infiltration Cellular, Mononuclear Cell	1 [1.0]			
Peripheral Nerve, Tibial	(88)	(89)	(90)	(88)
Degeneration	84 [2.6]	84 [2.7]	90 [2.5]	85 [2.6]
Spinal Cord, Cervical	(90)	(90)	(90)	(90)
Degeneration	30 [1.0]	38 [1.0]	41 [1.0]	32 [1.0]
Spinal Cord, Lumbar	(90)	(90)	(90)	(90)
Degeneration	21 [1.0]	10 [1.2]	17 [1.0]	12 [1.3]
Nerve, Degeneration	79 [2.4]	82 [2.6]	87 [2.6]	81 [2.9]
Spinal Cord, Thoracic	(90)	(90)	(90)	(90)
Degeneration	58 [1.5]	68 [1.6]	72 [1.8]	69 [1.8]
Hemorrhage, Focal	1 [1.0]			
Trigeminal Ganglion	(75)	(73)	(77)	(77)
Degeneration	23 [1.0]	25 [1.1]	22 [1.0]	15 [1.0]

RESPIRATORY SYSTEM

Lung	(90)	(90)	(90)	(90)
Congestion	13 [2.0]	15 [1.9]	11 [1.8]	10 [2.3]
Cyst		1		
Fibrosis		1 [1.0]		
Foreign Body	4		2	1
Hemorrhage	3 [1.7]	4 [2.0]	3 [1.7]	
Inflammation, Suppurative	3 [2.7]	1 [2.0]	2 [2.5]	1 [3.0]
Inflammation, Granulomatous			3 [1.0]	
Inflammation, Chronic Active	2 [1.0]	8 [1.4]	5 [2.2]	3 [1.3]
Inflammation, Subacute	2 [1.5]			

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Mineral			1 [2.0]	
Alveolar Epithelium, Hyperplasia			1 [4.0]	
Alveolus, Infiltration Cellular, Histiocyte	37 [1.2]	40 [1.2]	43 [1.3]	48 [1.4]
Artery, Inflammation, Chronic Active	3 [2.3]	5 [2.2]	6 [2.7]	3 [2.0]
Artery, Mineral	1 [2.0]			
Artery, Mediastinum, Inflammation, Chronic Active	2 [1.5]			
Bronchiole, Hyperplasia, Epithelial			1 [2.0]	
Epithelium Alveolus, Hyperplasia	3 [2.7]	3 [2.0]	3 [2.0]	1 [3.0]
Interstitium, Fibrosis			1 [1.0]	
Interstitium, Mineral	1 [2.0]		2 [2.5]	
Perivascular, Inflammation, Chronic Active	1 [2.0]			
Nose	(89)	(90)	(90)	(89)
Foreign Body	5	3	2	4
Fungus		1		
Hyperplasia, Lymphocyte			2 [2.0]	
Inflammation, Suppurative	10 [1.6]	12 [1.7]	13 [1.5]	10 [1.2]
Inflammation, Chronic Active		1 [3.0]	2 [2.5]	
Mineral			1 [1.0]	
Nasopharyngeal Duct, Respiratory Epithelium, Hyperplasia	1 [3.0]			
Olfactory Epithelium, Accumulation, Hyaline Droplet	79 [1.9]	87 [2.1]	82 [1.8]	81 [1.8]
Olfactory Epithelium, Atrophy			1 [2.0]	
Olfactory Epithelium, Hyperplasia			2 [1.0]	
Olfactory Epithelium, Metaplasia, Respiratory	3 [1.0]	6 [1.7]	7 [1.4]	2 [1.5]
Respiratory Epithelium, Accumulation, Hyaline Droplet	3 [1.0]	2 [1.0]	1 [1.0]	1 [1.0]
Respiratory Epithelium, Atrophy		2 [1.0]		
Respiratory Epithelium, Hyperplasia	3 [1.3]	11 [1.5]	14 [1.6]	11 [1.3]
Respiratory Epithelium, Hyperplasia, Goblet Cell	1 [1.0]			
Respiratory Epithelium, Metaplasia, Squamous			1 [1.0]	
Respiratory Epithelium, Mineral	1 [2.0]			
Septum, Developmental Malformation				1
Trachea	(90)	(88)	(87)	(86)
Artery, Inflammation, Chronic Active		1 [3.0]		1 [3.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Artery, Mineral	1 [3.0]			
Epithelium, Hyperplasia	1 [3.0]			
Epithelium, Metaplasia, Squamous	1 [1.0]			
Glands, Inflammation, Acute				1 [2.0]

SPECIAL SENSES SYSTEM

Eye	(85)	(86)	(87)	(83)
Retinal Detachment	1 [3.0]			
Anterior Chamber, Inflammation, Acute	4 [1.8]	5 [1.4]	3 [2.7]	2 [1.5]
Cornea, Degeneration		1 [1.0]		
Cornea, Fibrosis	1 [1.0]	3 [1.0]	4 [1.3]	6 [1.2]
Cornea, Inflammation, Acute	28 [2.1]	33 [1.5]	25 [1.7]	25 [1.4]
Cornea, Neovascularization	10 [1.4]	19 [1.2]	20 [1.3]	19 [1.2]
Cornea, Ulcer	6 [2.5]	2 [2.5]	1 [3.0]	2 [2.5]
Cornea, Epithelium, Degeneration		2 [1.0]	2 [1.5]	2 [1.0]
Cornea, Epithelium, Hyperplasia	13 [2.4]	17 [1.5]	15 [2.1]	20 [1.4]
Cornea, Epithelium, Regeneration		2 [2.5]	2 [1.5]	
Lens, Cataract		2 [1.5]		2 [1.5]
Retina, Atrophy	6 [1.3]	10 [1.2]	12 [1.0]	14 [1.1]
Retina, Degeneration	1 [1.0]			
Retina, Dysplasia		1 [2.0]		
Retina, Gliosis		1 [2.0]		
Harderian Gland	(90)	(90)	(90)	(90)
Atrophy	1 [1.0]	1 [1.0]	1 [1.0]	
Cyst			1	
Degeneration, Cystic	2 [1.5]			3 [1.3]
Hyperplasia				3 [1.3]
Hypertrophy		2 [1.0]		1 [2.0]
Inflammation, Granulomatous			2 [1.0]	
Inflammation, Acute	2 [2.5]			
Inflammation, Chronic			2 [1.0]	
Inflammation, Chronic Active	2 [1.0]		1 [1.0]	1 [1.0]
Lacrimal Gland	(2)	(1)	(2)	(2)
Inflammation, Granulomatous			1 [2.0]	

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Metaplasia, Harderian Gland	2 [2.0]	1 [2.0]	2 [3.0]	2 [3.0]

URINARY SYSTEM

Kidney	(90)	(90)	(90)	(90)
Infarct			1 [1.0]	
Inflammation, Suppurative			1 [2.0]	1 [2.0]
Mineral	1 [3.0]		1 [3.0]	1 [2.0]
Nephropathy, Chronic Progressive	88 [3.7]	89 [3.2]	90 [2.9]	89 [2.6]
Thrombus	1 [3.0]			
Artery, Inflammation, Chronic Active				1 [2.0]
Artery, Mineral	2 [2.0]	1 [1.0]		
Pelvis, Dilation	1 [2.0]	2 [2.0]	1 [3.0]	
Pelvis, Inflammation, Suppurative		1 [2.0]	1 [2.0]	1 [1.0]
Pelvis, Inflammation, Chronic Active				1 [1.0]
Renal Tubule, Accumulation, Hyaline Droplet			1 [3.0]	1 [3.0]
Renal Tubule, Cyst	18	17	14	6
Renal Tubule, Hyperplasia		2 [1.0]	1 [2.0]	2 [1.0]
Renal Tubule, Hyperplasia, Atypical	2 [3.0]			
Renal Tubule, Hyperplasia, Oncocytic	2 [1.0]			
Urothelium, Hyperplasia	1 [2.0]	2 [2.5]	1 [2.0]	2 [1.5]
Ureter	(0)	(1)	(0)	(0)
Dilation		1 [2.0]		
Urethra	(0)	(0)	(1)	(0)
Urinary Bladder	(89)	(89)	(86)	(85)
Dilation			1 [4.0]	
Hemorrhage	2 [3.0]			
Inflammation, Suppurative				1 [3.0]
Inflammation, Acute	2 [2.5]			
Inflammation, Chronic Active		1 [2.0]		
Necrosis	1 [1.0]			
Artery, Inflammation, Chronic Active		1 [1.0]		
Muscularis, Degeneration	1 [1.0]			
Serosa, Inflammation, Chronic Active		1 [3.0]		
Urothelium, Hyperplasia	1 [1.0]	1 [3.0]	2 [1.5]	1 [1.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 59

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Date Report Requested: 01/02/2018

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE

0.0W/kg(GSM)chr

1.5W/kg(GSM)chr

3.0W/kg(GSM)chr

6.0W/kg(GSM)chr

*** END OF MALE ***

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE

0.0W/kg(GSM)chr

1.5W/kg(GSM)chr

3.0W/kg(GSM)chr

6.0W/kg(GSM)chr

Disposition Summary

	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Animals Initially In Study	105	105	105	105
Early Deaths				
Accidentally Killed	1			
Moribund Sacrifice	30	25	31	22
Natural Death	11	10	11	11
Survivors				
Moribund Sacrifice	1	2		
Natural Death		1	1	
Terminal Sacrifice	47	52	47	57
Animals Examined Microscopically	90	90	90	90

ALIMENTARY SYSTEM

Esophagus	(90)	(90)	(90)	(90)
Dilation			1 [3.0]	
Intestine Large, Cecum	(84)	(83)	(83)	(84)
Serosa, Inflammation, Acute		1 [2.0]		
Intestine Large, Colon	(89)	(88)	(89)	(89)
Intestine Large, Rectum	(90)	(89)	(89)	(89)
Hyperplasia, Lymphocyte		1 [3.0]		1 [2.0]
Inflammation, Acute				1 [1.0]
Necrosis				1 [1.0]
Epithelium, Hyperplasia				1 [2.0]
Epithelium, Metaplasia, Squamous			1 [2.0]	
Intestine Small, Duodenum	(88)	(85)	(83)	(85)
Ectopic Tissue				1
Ulcer		1 [4.0]		
Intestine Small, Ileum	(86)	(82)	(81)	(83)
Hyperplasia, Lymphocyte	1 [2.0]			
Necrosis, Lymphoid				1 [1.0]
Serosa, Inflammation, Acute		1 [1.0]		
Intestine Small, Jejunum	(83)	(82)	(81)	(84)
Liver	(90)	(90)	(90)	(90)
Angiectasis	6 [1.2]	4 [1.8]	6 [1.2]	6 [1.3]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Basophilic Focus	11	17	11	8
Clear Cell Focus	2	3	6	6
Congestion		1 [2.0]	2 [2.0]	
Eosinophilic Focus	9	26	23	23
Extramedullary Hematopoiesis	15 [1.1]	19 [1.1]	17 [1.1]	12 [1.1]
Fibrosis		1 [2.0]		
Hepatodiaphragmatic Nodule	1		1	
Infiltration Cellular, Histiocyte			2 [2.5]	
Infiltration Cellular, Mixed Cell	1 [1.0]	4 [1.0]	1 [1.0]	2 [1.0]
Infiltration Cellular, Mononuclear Cell		1 [1.0]		
Inflammation, Acute		1 [1.0]		1 [1.0]
Inflammation, Chronic		1 [2.0]		
Inflammation, Chronic Active			2 [1.0]	
Mixed Cell Focus	29	23	33	28
Pigment		1 [1.0]		
Bile Duct, Cyst	11	6	5	8
Bile Duct, Fibrosis	1 [1.0]			
Bile Duct, Hyperplasia	9 [1.2]	5 [1.2]	10 [1.1]	9 [1.2]
Bile Duct, Inflammation, Chronic Active			1 [1.0]	
Centrilobular, Hepatocyte, Necrosis		3 [1.7]		2 [2.5]
Centrilobular, Hepatocyte, Vacuolation, Cytoplasmic		1 [3.0]		
Hepatocyte, Degeneration			1 [2.0]	
Hepatocyte, Hypertrophy	2 [2.0]	5 [2.0]	2 [1.5]	6 [1.3]
Hepatocyte, Increased Mitoses	2 [1.0]			
Hepatocyte, Necrosis	4 [1.5]	2 [2.0]	5 [1.8]	8 [1.6]
Hepatocyte, Vacuolation, Cytoplasmic	1 [2.0]	1 [1.0]	1 [3.0]	3 [1.0]
Kupffer Cell, Hyperplasia	3 [1.0]			
Kupffer Cell, Hypertrophy	2 [1.5]			
Periductal, Cholangiofibrosis	1 [2.0]			1 [2.0]
Serosa, Inflammation, Suppurative		1 [2.0]		
Serosa, Inflammation, Chronic Active	1 [2.0]			
Sinusoid, Dilation		1 [1.0]	1 [2.0]	
Mesentery	(4)	(5)	(5)	(5)
Inflammation, Chronic Active	1 [4.0]		1 [1.0]	
Necrosis	1 [1.0]	3 [2.3]	2 [2.0]	3 [2.3]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Artery, Inflammation, Chronic Active				1 [4.0]
Oral Mucosa	(1)	(0)	(0)	(0)
Pancreas	(90)	(90)	(90)	(87)
Ectopic Liver	1			
Inflammation, Acute		1 [2.0]		
Inflammation, Chronic Active	1 [2.0]		2 [1.5]	
Acinus, Atrophy	5 [1.0]	4 [1.8]	4 [1.3]	5 [1.2]
Acinus, Hyperplasia	1 [2.0]	2 [1.0]	5 [1.2]	2 [1.0]
Artery, Inflammation, Chronic Active		2 [2.5]	1 [2.0]	1 [4.0]
Periductal, Cholangiofibrosis			7 [2.3]	4 [1.5]
Salivary Glands	(90)	(89)	(90)	(90)
Duct, Parotid Gland, Dilation	1 [3.0]			1 [2.0]
Parotid Gland, Atrophy	4 [2.3]	11 [2.3]	8 [1.9]	4 [2.3]
Parotid Gland, Inflammation, Acute				1 [1.0]
Parotid Gland, Vacuolation, Cytoplasmic				1 [1.0]
Sublingual Gland, Atrophy				2 [2.0]
Sublingual Gland, Metaplasia			1 [3.0]	
Submandibular Gland, Atrophy		1 [2.0]	1 [3.0]	
Stomach, Forestomach	(90)	(90)	(90)	(90)
Edema	2 [2.0]	2 [1.5]	1 [2.0]	
Erosion	2 [1.5]			
Fibrosis	1 [2.0]			
Inflammation, Acute		1 [3.0]		
Inflammation, Chronic Active	4 [1.8]	5 [1.8]		
Ulcer	1 [2.0]	7 [2.3]	2 [2.5]	2 [1.5]
Epithelium, Hyperplasia	10 [1.8]	14 [2.5]	8 [1.6]	8 [2.0]
Epithelium, Hyperplasia, Basal Cell	1 [1.0]			1 [1.0]
Stomach, Glandular	(90)	(89)	(90)	(89)
Erosion	1 [2.0]	1 [4.0]		
Tongue	(1)	(0)	(0)	(0)
Tooth	(0)	(0)	(1)	(0)
Dysplasia			1 [3.0]	

CARDIOVASCULAR SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Aorta	(90)	(90)	(90)	(90)
Dilation			1 [2.0]	
Mineral		2 [1.0]	1 [2.0]	
Heart	(90)	(90)	(90)	(90)
Cardiomyopathy	40 [1.1]	30 [1.2]	39 [1.1]	27 [1.1]
Atrium, Myocardium, Hypertrophy		1 [1.0]		
Myocardium, Hypertrophy		1 [3.0]		
Myocardium, Mineral		1 [1.0]		
Myocardium, Necrosis				1 [1.0]
Myocardium, Schwann Cell, Hyperplasia				1 [1.0]
Myocardium, Ventricle Right, Degeneration			1 [2.0]	
Vein, Mineral		1 [2.0]		
Ventricle Right, Cardiomyopathy	4 [1.0]	9 [1.1]	14 [1.1]	15 [1.2]

ENDOCRINE SYSTEM

Adrenal Cortex	(90)	(90)	(89)	(90)
Accessory Adrenal Cortical Nodule	5	7	6	6
Angiectasis		1 [1.0]		
Atrophy	1 [4.0]	1 [3.0]		
Cyst			1	
Degeneration, Cystic	22 [1.7]	26 [1.6]	36 [1.7]	29 [1.8]
Extramedullary Hematopoiesis		1 [1.0]	1 [1.0]	
Hemorrhage		1 [3.0]	1 [2.0]	
Hyperplasia	14 [1.9]	26 [1.8]	40 [1.9]	26 [1.6]
Hypertrophy	52 [1.5]	54 [1.8]	51 [1.8]	56 [1.5]
Mineral			1 [2.0]	
Necrosis	2 [2.5]	4 [1.8]	1 [3.0]	2 [1.5]
Pigment	1 [3.0]			
Thrombus		3 [1.0]	1 [1.0]	
Vacuolation, Cytoplasmic	18 [1.5]	21 [1.4]	11 [1.6]	8 [1.1]
Adrenal Medulla	(86)	(90)	(90)	(86)
Hyperplasia	13 [1.5]	19 [1.2]	14 [1.4]	25 [1.8]
Necrosis	1 [3.0]			
Islets, Pancreatic	(90)	(89)	(90)	(87)

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Ectopic Tissue			1	
Hyperplasia	15 [1.2]	6 [1.8]	11 [2.3]	12 [1.9]
Parathyroid Gland	(87)	(79)	(82)	(79)
Cyst		1		
Fibrosis	13 [1.2]	4 [1.3]	9 [1.2]	6 [1.2]
Hyperplasia		1 [3.0]	2 [1.5]	1 [1.0]
Hyperplasia, Focal	3 [1.3]		2 [1.5]	
Hypertrophy		1 [2.0]		
Pituitary Gland	(90)	(90)	(90)	(90)
Cyst	1			
Pars Distalis, Angiectasis	2 [2.5]			
Pars Distalis, Atrophy		1 [3.0]		
Pars Distalis, Cyst	7	3	4	4
Pars Distalis, Hyperplasia	20 [2.5]	26 [2.0]	22 [1.9]	22 [2.0]
Pars Distalis, Vacuolation, Cytoplasmic			1 [2.0]	
Pars Intermedia, Cyst	3	3	2	2
Pars Intermedia, Hyperplasia	1 [2.0]		1 [2.0]	
Pars Intermedia, Vacuolation, Cytoplasmic			1 [2.0]	
Pars Nervosa, Cyst		1		
Thyroid Gland	(90)	(88)	(90)	(88)
C-cell, Hyperplasia	28 [2.3]	49 [1.6]	45 [1.8]	43 [1.7]
Follicle, Cyst	1	2		1

GENERAL BODY SYSTEM

Tissue NOS	(8)	(10)	(8)	(10)
Inflammation, Chronic Active	1 [4.0]			
Abdominal, Necrosis		1 [2.0]		
Fat, Necrosis	6 [2.7]	8 [2.4]	7 [2.6]	9 [2.7]

GENITAL SYSTEM

Clitoral Gland	(87)	(85)	(86)	(87)
Hyperplasia, Focal		3 [2.3]		
Inflammation, Suppurative	1 [2.0]	1 [1.0]		

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Inflammation, Granulomatous		1 [4.0]		1 [2.0]
Inflammation, Acute			1 [3.0]	1 [3.0]
Inflammation, Chronic Active	28 [1.7]	24 [1.4]	32 [1.9]	40 [1.8]
Metaplasia, Squamous		1 [2.0]		
Duct, Dilation	47 [2.9]	47 [2.8]	44 [2.8]	40 [2.8]
Ovary	(90)	(90)	(90)	(90)
Atrophy	72 [3.0]	63 [3.5]	66 [3.3]	71 [3.4]
Congestion	1 [2.0]			
Cyst	22	24	23	27
Fibrosis		1 [3.0]		
Inflammation, Suppurative		1 [3.0]		
Inflammation, Chronic				1 [2.0]
Inflammation, Chronic Active				2 [2.5]
Necrosis				1 [2.0]
Bursa, Dilation	4 [2.8]	5 [2.2]	6 [1.5]	6 [2.8]
Interstitial Cell, Hyperplasia		2 [2.5]		
Periovarian Tissue, Cyst			1	
Periovarian Tissue, Hemorrhage			1 [2.0]	
Periovarian Tissue, Inflammation, Chronic Active				1 [2.0]
Rete Ovarii, Hyperplasia	15 [2.0]	25 [1.6]	13 [1.7]	12 [2.3]
Oviduct	(1)	(0)	(0)	(0)
Cyst	1			
Uterus	(90)	(89)	(90)	(90)
Adenomyosis				1 [2.0]
Angiectasis	1 [2.0]	1 [2.0]		
Cyst	5	3	11	7
Dilation	8 [2.1]	7 [3.9]	12 [2.8]	4 [3.8]
Fibrosis	1 [3.0]	1 [3.0]	1 [1.0]	
Hemorrhage		3 [3.3]	4 [2.5]	1 [3.0]
Hyperplasia, Stromal		3 [2.7]	1 [2.0]	4 [1.5]
Infiltration Cellular, Mononuclear Cell			1 [1.0]	
Inflammation, Suppurative	4 [2.3]	11 [2.4]	6 [1.5]	10 [1.4]
Inflammation, Acute	1 [1.0]			2 [1.5]
Inflammation, Chronic Active		2 [2.5]	6 [1.8]	1 [2.0]
Pigment		1 [2.0]		1 [1.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Thrombus	1 [4.0]	2 [3.0]		1 [3.0]
Artery, Inflammation, Chronic Active				1 [2.0]
Cervix, Cyst			1	
Cervix, Hyperplasia, Stromal	2 [3.0]			1 [2.0]
Cervix, Serosa, Fibrosis	1 [2.0]			
Endometrium, Hyperplasia, Cystic	37 [1.7]	33 [1.7]	28 [1.7]	39 [1.7]
Epithelium, Metaplasia, Squamous	48 [2.0]	38 [2.3]	39 [2.1]	45 [1.8]
Serosa, Fibrosis			1 [3.0]	
Serosa, Inflammation, Suppurative		1 [4.0]		
Vein, Thrombus		1 [1.0]		
Vagina	(2)	(3)	(1)	(1)
Exudate		1 [3.0]		
Inflammation, Chronic Active				1 [1.0]

HEMATOPOIETIC SYSTEM

Bone Marrow	(90)	(90)	(90)	(90)
Hypercellularity	56 [2.8]	57 [3.1]	55 [3.1]	56 [3.0]
Myelofibrosis				1 [4.0]
Lymph Node	(13)	(14)	(21)	(14)
Axillary, Hyperplasia, Lymphocyte				1 [2.0]
Axillary, Proliferation, Plasma Cell	1 [3.0]			1 [1.0]
Deep Cervical, Fibrosis				1 [3.0]
Deep Cervical, Inflammation, Chronic Active				1 [2.0]
Iliac, Congestion				1 [2.0]
Iliac, Erythrophagocytosis	3 [2.3]	1 [1.0]	3 [2.3]	2 [3.0]
Iliac, Hyperplasia, Lymphocyte	1 [1.0]		2 [1.5]	2 [1.0]
Iliac, Infiltration Cellular, Histiocyte			1 [2.0]	
Iliac, Inflammation, Acute	1 [2.0]			
Iliac, Pigment	1 [1.0]		1 [1.0]	1 [2.0]
Iliac, Proliferation, Plasma Cell	6 [2.3]	1 [1.0]	2 [2.0]	
Iliac, Lymphatic Sinus, Ectasia		1 [1.0]	3 [1.3]	
Inguinal, Erythrophagocytosis	1 [2.0]			
Inguinal, Hyperplasia, Lymphocyte		1 [2.0]		
Inguinal, Infiltration Cellular, Plasma Cell		1 [1.0]		

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Inguinal, Pigment			1 [1.0]	
Inguinal, Proliferation, Plasma Cell	1 [3.0]			
Inguinal, Lymphatic Sinus, Ectasia	1 [2.0]			
Lumbar, Erythrophagocytosis	1 [3.0]	1 [2.0]	1 [2.0]	1 [3.0]
Lumbar, Hyperplasia, Lymphocyte		2 [1.0]		
Lumbar, Infiltration Cellular, Histiocyte			1 [2.0]	
Lumbar, Inflammation, Chronic Active		1 [2.0]		
Lumbar, Proliferation, Plasma Cell		2 [2.5]	1 [2.0]	
Lumbar, Lymphatic Sinus, Ectasia		1 [1.0]		
Lymphatic Sinus, Mediastinal, Ectasia			1 [2.0]	
Lymphatic Sinus, Renal, Ectasia		1 [2.0]		
Mediastinal, Congestion	1 [2.0]		1 [3.0]	
Mediastinal, Erythrophagocytosis		3 [2.3]	5 [1.6]	3 [1.3]
Mediastinal, Hyperplasia, Lymphocyte			2 [1.0]	1 [1.0]
Mediastinal, Proliferation, Plasma Cell	1 [3.0]		3 [1.7]	
Pancreatic, Erythrophagocytosis	1 [3.0]	1 [3.0]	1 [1.0]	
Renal, Erythrophagocytosis		2 [2.0]	1 [3.0]	2 [3.0]
Renal, Inflammation, Chronic Active		1 [4.0]		
Lymph Node, Mandibular Congestion	(90)	(89)	(89)	(90) 1 [2.0]
Erythrophagocytosis		2 [2.0]	4 [2.0]	3 [1.7]
Hemorrhage	1 [1.0]			
Hyperplasia, Lymphocyte	46 [1.3]	40 [1.3]	44 [1.5]	51 [1.3]
Hyperplasia, Reticulum Cell				1 [4.0]
Infiltration Cellular, Histiocyte		1 [1.0]		
Inflammation, Chronic Active			1 [2.0]	
Proliferation, Plasma Cell	68 [1.6]	57 [1.5]	65 [1.8]	56 [1.6]
Lymphatic Sinus, Ectasia	1 [1.0]	3 [1.7]	7 [1.4]	1 [3.0]
Lymph Node, Mesenteric Atrophy	(90) 1 [1.0]	(90) 1 [2.0]	(90)	(90)
Erythrophagocytosis	1 [3.0]	3 [2.0]	3 [1.7]	5 [1.4]
Hemorrhage		1 [2.0]		
Hyperplasia, Lymphocyte		1 [1.0]		1 [1.0]
Infiltration Cellular, Histiocyte	2 [1.5]	3 [1.3]	2 [1.0]	1 [2.0]
Necrosis, Lymphocyte				1 [3.0]
Pigment				1 [1.0]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Proliferation, Plasma Cell		1 [1.0]	1 [4.0]	
Lymphatic Sinus, Ectasia		1 [1.0]		
Spleen	(90)	(90)	(90)	(90)
Accessory Spleen			1 [3.0]	
Congestion		2 [2.5]	1 [1.0]	
Developmental Malformation			1	
Extramedullary Hematopoiesis	80 [2.4]	77 [2.5]	78 [2.5]	78 [2.3]
Hemorrhage			1 [1.0]	
Hyperplasia, Stromal	1 [4.0]			
Pigment	74 [1.9]	40 [2.2]	47 [2.0]	46 [2.0]
Red Pulp, Atrophy	7 [2.3]	5 [1.8]	2 [2.0]	1 [2.0]
Red Pulp, Hyperplasia		2 [2.5]		
White Pulp, Atrophy	3 [1.3]	6 [2.0]	6 [1.7]	2 [1.5]
Thymus	(87)	(86)	(88)	(86)
Atrophy	75 [1.7]	70 [2.1]	62 [1.9]	61 [1.6]
Cyst	39	30	33	28
Ectopic Parathyroid Gland	1	1	2	
Ectopic Thyroid		1		1
Hemorrhage	2 [2.0]	2 [2.0]	2 [2.0]	3 [1.3]
Hyperplasia, Epithelial	55 [1.2]	19 [1.4]	19 [1.4]	20 [1.5]
Necrosis, Lymphocyte				1 [2.0]

INTEGUMENTARY SYSTEM

Mammary Gland	(90)	(89)	(89)	(90)
Galactocele	24	18	14	10
Hyperplasia	49 [2.1]	41 [2.4]	51 [1.9]	28 [2.3]
Hyperplasia, Atypical				3 [1.3]
Inflammation, Granulomatous			1 [2.0]	
Duct, Dilation	56 [2.1]	52 [1.3]	55 [1.6]	58 [1.4]
Lymphatic, Dilation			1 [3.0]	
Skin	(90)	(90)	(90)	(90)
Cyst Epithelial Inclusion	1	2		
Inflammation, Acute		1 [2.0]		
Inflammation, Chronic Active	1 [2.0]			

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Ulcer			1 [2.0]	
Dermis, Fibrosis		1 [1.0]		
Epidermis, Hyperplasia	2 [3.0]			
Subcutaneous Tissue, Edema			1 [2.0]	1 [1.0]
Subcutaneous Tissue, Inflammation, Chronic Active			1 [2.0]	1 [1.0]

MUSCULOSKELETAL SYSTEM

Bone	(90)	(90)	(90)	(90)
Fibrosis		1 [1.0]	1 [1.0]	
Fibrous Osteodystrophy		1 [1.0]	2 [2.5]	
Increased Bone		1 [1.0]	1 [2.0]	
Cranium, Fracture	1			
Mandible, Fracture	1			
Maxilla, Fracture	1			
Vertebra, Increased Bone		1 [3.0]		
Vertebra, Inflammation, Chronic Active		1 [4.0]		
Skeletal Muscle	(90)	(90)	(90)	(90)
Degeneration	3 [1.0]	7 [1.4]	4 [1.0]	3 [1.3]
Mineral				1 [1.0]

NERVOUS SYSTEM

Brain	(90)	(90)	(90)	(90)
Compression	26 [1.8]	16 [1.4]	18 [1.6]	11 [1.9]
Congestion	1 [1.0]	1 [2.0]		
Cyst				1
Edema	2 [1.5]			2 [1.5]
Hemorrhage		1 [1.0]		1 [1.0]
Mineral			1 [1.0]	
Necrosis				1 [1.0]
Pigment		1 [1.0]		
Cerebellum, Hemorrhage		1 [1.0]		
Glial Cell, Hyperplasia			1 [4.0]	

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Hypothalamus, Cyst		1		
Meninges, Hyperplasia	1 [2.0]			
Meninges, Hyperplasia, Granular Cell	1 [3.0]		1 [3.0]	
Pineal Gland, Mineral	1 [1.0]	1 [1.0]	3 [1.0]	1 [1.0]
Pineal Gland, Vacuolation, Cytoplasmic	1 [1.0]	3 [1.0]	2 [1.0]	1 [1.0]
Nerve Trigeminal	(84)	(88)	(89)	(90)
Degeneration	64 [2.0]	71 [2.0]	65 [2.1]	74 [2.1]
Peripheral Nerve, Sciatic	(90)	(90)	(90)	(90)
Degeneration	80 [1.5]	84 [1.5]	81 [1.4]	84 [1.6]
Infiltration Cellular, Mixed Cell	1 [1.0]			
Peripheral Nerve, Tibial	(90)	(90)	(90)	(89)
Degeneration	77 [1.5]	83 [1.5]	80 [1.5]	80 [1.5]
Spinal Cord, Cervical	(90)	(90)	(90)	(90)
Degeneration	24 [1.1]	29 [1.1]	43 [1.0]	23 [1.0]
Spinal Cord, Lumbar	(90)	(90)	(90)	(90)
Cyst		1		1
Degeneration	10 [1.1]	7 [1.1]	13 [1.3]	12 [1.1]
Nerve, Degeneration	74 [2.1]	81 [1.9]	70 [2.0]	78 [2.2]
Spinal Cord, Thoracic	(90)	(90)	(90)	(90)
Degeneration	59 [1.7]	64 [1.6]	61 [1.7]	65 [1.7]
Trigeminal Ganglion	(81)	(79)	(80)	(79)
Degeneration	33 [1.1]	31 [1.0]	28 [1.0]	17 [1.1]

RESPIRATORY SYSTEM

Lung	(90)	(90)	(90)	(90)
Congestion	3 [2.0]	5 [1.4]	5 [2.2]	3 [1.7]
Foreign Body		2		
Hemorrhage	1 [1.0]	1 [2.0]	4 [1.3]	2 [1.0]
Inflammation, Suppurative	2 [1.0]	1 [4.0]		
Inflammation, Granulomatous	1 [1.0]	2 [1.0]	3 [1.3]	
Inflammation, Chronic Active	6 [1.0]	8 [1.1]	9 [1.3]	8 [1.3]
Pigment				1 [1.0]
Alveolar Epithelium, Metaplasia, Squamous			1 [1.0]	1 [1.0]
Alveolus, Infiltration Cellular, Histiocyte	71 [1.6]	75 [1.6]	83 [1.6]	82 [1.8]

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Alveolus, Pigment			2 [1.5]	1 [1.0]
Artery, Inflammation, Chronic Active	1 [2.0]			
Bronchiole, Hyperplasia			1 [2.0]	
Epithelium Alveolus, Hyperplasia	2 [1.5]	2 [2.5]	6 [1.7]	2 [1.5]
Interstitial, Fibrosis		1 [2.0]		
Nose	(90)	(90)	(90)	(90)
Foreign Body			1	
Inflammation, Suppurative	1 [1.0]	2 [3.0]	3 [1.0]	1 [1.0]
Inflammation, Acute			1 [1.0]	1 [1.0]
Inflammation, Chronic Active			1 [2.0]	
Nasopharyngeal Duct, Inflammation, Chronic Active		1 [2.0]		
Nerve, Olfactory Epithelium, Degeneration		1 [2.0]		
Olfactory Epithelium, Accumulation, Hyaline Droplet	89 [2.6]	86 [2.6]	88 [2.4]	87 [2.1]
Olfactory Epithelium, Atrophy		1 [1.0]	1 [1.0]	
Olfactory Epithelium, Degeneration		1 [1.0]		
Olfactory Epithelium, Metaplasia, Respiratory	1 [1.0]		1 [1.0]	
Respiratory Epithelium, Accumulation, Hyaline Droplet	12 [1.1]	8 [1.0]	10 [1.0]	10 [1.0]
Respiratory Epithelium, Hyperplasia			1 [2.0]	
Respiratory Epithelium, Metaplasia, Squamous			2 [1.5]	
Trachea	(89)	(90)	(89)	(87)
Inflammation, Chronic Active	1 [1.0]			
Artery, Inflammation, Chronic Active				1 [2.0]
Epithelium, Hyperplasia		1 [2.0]		
Glands, Cyst	1			

SPECIAL SENSES SYSTEM

Eye	(88)	(85)	(87)	(87)
Cornea, Inflammation, Acute	1 [1.0]			
Cornea, Epithelium, Hyperplasia	1 [1.0]			
Lens, Cataract	1 [2.0]			
Retina, Atrophy	18 [1.0]	15 [1.1]	16 [1.1]	13 [1.0]
Retina, Dysplasia	1 [1.0]			

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Sclera, Inflammation, Acute			1 [1.0]	
Harderian Gland	(90)	(90)	(90)	(90)
Atrophy	13 [1.0]	12 [1.1]	15 [1.1]	24 [1.1]
Hyperplasia			1 [3.0]	
Infiltration Cellular, Lymphocyte	2 [1.0]			
Inflammation, Granulomatous	7 [1.0]	9 [1.0]	9 [1.0]	10 [1.0]
Inflammation, Acute		1 [1.0]		
Inflammation, Chronic	7 [1.3]	4 [1.0]	1 [1.0]	2 [1.0]
Inflammation, Chronic Active	1 [1.0]	1 [1.0]	2 [1.0]	2 [1.0]
Zymbal's Gland	(0)	(0)	(0)	(1)

URINARY SYSTEM

Kidney	(90)	(90)	(90)	(89)
Ectopic Tissue		1		
Infarct		1 [2.0]		
Inflammation, Granulomatous				1 [1.0]
Inflammation, Acute	1 [1.0]			
Inflammation, Chronic Active		1 [4.0]	1 [1.0]	
Mineral				1 [1.0]
Necrosis		1 [4.0]		
Nephropathy, Chronic Progressive	74 [1.2]	61 [1.2]	68 [1.2]	59 [1.2]
Artery, Inflammation, Chronic Active	1 [2.0]			1 [2.0]
Pelvis, Dilation	3 [2.3]	2 [3.5]	1 [3.0]	
Renal Tubule, Accumulation, Hyaline Droplet		2 [2.5]	1 [3.0]	
Renal Tubule, Cyst	3	2	1	1
Renal Tubule, Hyperplasia, Atypical		1 [3.0]		1 [2.0]
Renal Tubule, Hypertrophy		1 [1.0]		
Renal Tubule, Necrosis		2 [2.0]		
Renal Tubule, Pigment		1 [3.0]		
Urothelium, Hyperplasia				1 [2.0]
Urinary Bladder	(88)	(88)	(90)	(87)
Dilation	1 [2.0]			
Edema		1 [2.0]		
Hemorrhage		1 [1.0]	1 [4.0]	

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 59

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Date Report Requested: 01/02/2018

Test Type: CHRONIC

Cell Phone Radiation: GSM

Time Report Requested: 11:58:55

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr
Infiltration Cellular, Histiocyte				1 [2.0]
Infiltration Cellular, Mononuclear Cell				1 [2.0]
Inflammation, Acute	3 [2.3]		1 [4.0]	
Necrosis	1 [3.0]			
Urothelium, Hyperplasia	1 [2.0]	1 [2.0]		

*** END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)